

AD-A128 236

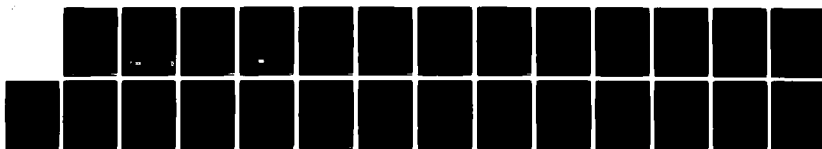
PRIVATIZING AIRPORTS IN WASHINGTON DC(U) PUBLIC  
RESEARCH INST ALEXANDRIA VA P FELDMAN FEB 83  
PRI-PP-375 N00014-76-C-0001

1/1

UNCLASSIFIED

F/G 1/5

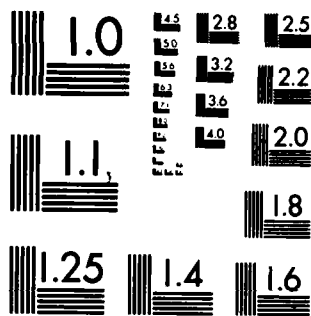
NL



END

DATE  
FILMED

6-85  
DTIC



MICROCOPY RESOLUTION TEST CHART  
NATIONAL BUREAU OF STANDARDS-1963-A

2

Professional Paper 375 / February 1983

AD A 128236

# PRIVATIZING AIRPORTS IN WASHINGTON, D.C.

Paul Feldman

*100014-76-C-0001*

DTIC FILE COPY



The Public Research Institute

A Division of the Center for Naval Analyses

DTIC  
ELECTE  
MAY 18 1983

S D

E

This document has been approved  
for public release and sale; its  
distribution is unlimited.

83 05 18 031

The ideas expressed in Professional Papers are those of the authors. Professional Papers do not necessarily represent the views of either the Public Research Institute or any sponsoring agency. They are reproduced as a courtesy to the authors, under the CNA Professional Development Program.

# PRIVATIZING AIRPORTS IN WASHINGTON, D.C.

Paul Feldman

<b>Accession For</b>	
NTIS GRA&I	<input checked="" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A	



**The Public Research Institute**

*A Division of the Center for Naval Analyses*

2000 North Beauregard Street, Alexandria, Virginia 22311

"It is one of the finest problems of legislation--what the state ought to take upon itself to direct by the public wisdom, and what it ought to leave, with as little interference as possible, to individual discretion."

Edmund Burke  
Thoughts on Scarcity, 1795

Anyone observing the growth of government in the United States since 1795 might be tempted to judge that, over the years, Americans have resolved Burke's "finest problem" by opting for greater direction of private actions by the public wisdom and leaving less for individual discretion. Times change, however, and so does public opinion. Judging from the recent outpouring of complaints about the size of government and the extent of its interference in private decisions, it appears that Burke's problem has, once again, become a live issue.

There is at least one good reason why the role of government in society should be reexamined: when government substitutes the public wisdom for individual discretion, it, of necessity, also substitutes political criteria for economic criteria. That is, it relies on head counts and special group interests in determining how to conduct business, rather than on efficiency. The results are often neither politically nor economically satisfactory. A good example of an unsatisfactory outcome is in the provision of airport services in the Washington, D.C. area, where the FAA actually operates two of the three commercial airports.

In this paper, I assert that the country as a whole, and the D.C. area in particular, would be better off if the federal government were to sell its airports and leave their operation to individual discretion, with no interference whatsoever. I'm going to support that assertion in two ways: first, I'll go over the conditions under which it would be appropriate for the federal government to administer airports and show that those conditions do not exist in the District of Columbia. Then, I'll compare the existing arrangement with what would happen if the airports were privately operated.

The general conditions that call for government intervention in the provision of any services are familiar; legislators tend to state them as:

- o Lack of competition, so that a monopolist can restrict supply and maintain an artificially high price
- o Lack of information about a service so that consumers are unable to make rational choices among available alternatives
- o The existence of benefits that cannot be captured by a private entrepreneur (so he underinvests) or costs not borne by the entrepreneur (so he overproduces).

In the case of airports, particularly in the Washington, D.C. area, only the last of these holds.

Consider the possibility of monopoly. There are three major commercial airports serving the market: Washington National (WNA) and Dulles International (DIA), both run by the FAA, and Baltimore Washington International (BWI), run by the state of Maryland. They are not equal competitors; WNA has relatively short runways but is only 10 to 15 minutes from downtown Washington; DIA and BWI, with longer runways, are more like an hour away. Travelers prefer WNA to both of the others if for no other reason than its convenience--it is time saving. But ground travel is also less expensive; taxi fare to the downtown is only about \$5, while from DIA a taxi is \$35 and even the limousine, with all its delays and stops, costs more than \$7. But none of the three airports is able to unilaterally restrict air access to the city and thereby raise the price. In fact, there is excess airport capacity, and airlines could maintain access to the city even if one of the three were to close completely.

There is certainly no limit on information about the available service; airlines maintain a national network of bookings, and both they and consumers have instant access to all that anyone could ever want to know about available services.

It is true that there are uncharged costs of airport operations, for example, noise, air pollution, and the danger of aircraft falling in neighboring communities, but these are local, community costs. Federal



administration of the airports or even its intervention in their administration is not required for them to be handled properly.

The federal government takes care of problems that concern all of society: national security, protection of civil liberties, maintenance of free commerce and a stable value of the currency, and, one could argue persuasively, maintenance of some minimal level of personal (income) security. None of these problems resides in or is solved by provision of a particular amenity--airport facilities--to a particular community--Washington, D.C.

If the arguments are so clear, you may ask, why does the federal government run two of the three airports in the area? Both custom and history have a lot to do with it. When I say "custom," I'm referring to the fact that there isn't a major commercial airport in the U.S. that is privately owned and operated. I'm sure that the custom derives in part from the fact that airports are generally not profitable enough to attract sophisticated investors. By itself that isn't an overwhelming argument that airports ought to be government operated; if people in a community have a strong feeling that they should have an airport available to them, they might do well to build one and turn it over to a private operator to manage. But governments seem to work under the principle that once any government, anywhere, has done something, that constitutes proof that it is proper for other governments to do the

same. Moreover, once any government starts to do something, it takes the equivalent of an earthquake to make it stop.

In the case of Washington, there is also history. The federal government used to be the District's local government; it acted like a county or municipal administrator, and following custom, it provided the same kind of services. As I said before, Washington has three airports: National, Dulles, and Baltimore-Washington International. National was built by the federal government during the Great Depression; it was a time when spending on public works was probably more of an objective than the provision of airport services. The current WNA replaced an earlier airport--Washington-Hoover--which in turn had replaced two competing (side-by-side) airports, Washington National and Hoover, which had begun operations in 1926 where the Pentagon is now.

BWI, which opened as Friendship Airport in 1950, was built by Baltimore City to replace another airport, Harbor Field, which had also been built by the City nine years earlier (the timing suggests that the county's foresight had been slightly defective). The state of Maryland "bought" the airport from the county in 1972. It was a typical government bail-out of a losing operation, although in this case, the state was bailing out the city instead of a private entrepreneur.

The bail-out was made necessary by the overoptimistic planning of the FAA which, foreseeing massive growth in airline operations, had concluded that four airports were needed in the area; they said that BWI, "even if developed to its ultimate capacity...would be incapable of handling its share of the traffic after 1965." To handle the expected crush of passengers, they built Dulles airport in the early 1960s. The complex comprises modern airstrips, a beautiful and cleverly designed terminal with mobile lounges to take passengers to the planes, and a wholly dedicated 17 mile, four-lane, divided highway from the airport to the Beltway around the metropolitan area.

As things have turned out, the FAA's foresight about both future traffic and the ultimate capacity of BWI was wrong; not only was a fourth airport not needed, but the demand for both DIA and BWI failed to grow as anticipated, and BWI currently has enough capacity to handle nearly twice the number of passengers that now flow through both BWI and DIA combined. DIA is a white elephant, a continuing embarrassment to the FAA, and a thorn in the side of the Secretary of Transportation.

So here we are; custom and history have conspired to give us three airports in the area where two would do. Is that any reason to complain? The answer is an unqualified yes. I'm going to point out several unfortunate results that almost naturally flow from government operation. For the sake of simplicity, I'll restrict the discussion to DIA and WNA.

The first thing to note is that when government runs something, it tries not to make a profit or loss along the way. That's not as innocuous as it sounds. When you try to make your revenues exactly cover costs, you have to charge the average cost; fees in a busy place will be low while, where demand is low, the price will be high. But customers for any service respond to prices; high prices choke off sales and low prices encourage them. Average cost pricing has caused that kind of problem for the FAA.

Remember that WNA is preferred by customers because it is relatively close to downtown by taxi and, for the last few years, by subway. The airlines have responded to customer preferences by scheduling as many flights as they can to that popular terminal. But the heavier use reduces the average cost so that the interests of airlines reinforce those of passengers in choosing WNA, and since 1966 when jets were first allowed to use the facility, the airlines have tried to schedule more flights there than the facility can handle. For a long time, the FAA has limited operations--takeoffs and landings--to 60 per hour and urged airlines to shift flights from WNA to DIA while at the same time landing fees and mobile lounge charges at DIA were higher than the fees at WNA.

In 1980, the FAA temporarily eliminated landing fees and charges for the mobile lounges at DIA and now treat the two terminals as a

single costing unit. That removes the airlines' financial advantage in using WNA, but it also means that passengers who use WNA are subsidizing those who use DIA. Cross-subsidization among passengers is a familiar story in public transportation, and the amount of cross-subsidy is not large by government standards--a \$10 million drop in revenues at DIA, which works out to about \$4 per passenger.

But cross-subsidization is not all that's involved. Far worse is that some way has to be found to choose who will get to use the airport among all those who want to. The fact that some potential users must be excluded is also a familiar problem in government; it signals that something valuable to the public is underpriced. When that happens, the typical response is to ration the valuable resource in the name of "fairness," using some such rule as "First-come, First-served." The FAA has tried several variants of that: initially they limited access to the airport to airliners flying nonstop no more than 600 miles. The idea was that travelers from nearby would arrive first. Unfortunately, that rule barely excluded Atlanta and Chicago, so the limit was soon raised to 650 miles, which included those cities, and in 1982, it was raised to 1000 miles. Distance rationing has been far from successful because it has no real basis in either consumer preferences or in the economics of air transportation. The proof is in the absurd spectacle of planes taking off from WNA, landing at Dulles, and taking off again for destinations more than 1000 miles away, just to beat the system.

Rationing among airlines doesn't solve all of the problems, however. Operators of Piper Cubs and corporate jets claim that, in "fairness," they deserve access to National as much as do commercial airliners. The way things work in a political system, claims made by any organized group are treated as legitimate, and the FAA has responded by reserving about 23 of the 60 landing and take-off slots for such operators. If it is absurd for an airliner to hop to DIA in order to operate more than 1000 miles nonstop out of WNA, how else can one characterize the spectacle of an airliner with 150 passengers having to land at DIA in order to make way for a Piper Cub to land at WNA?

There are other irrationalities that spring from obsession with "fairness." For example, when the FAA announced a new "Washington Airports Policy" last November, its stated objectives included encouraging greater use of DIA, "which has been underutilized," and achieving "a more equitable balance of service between the two Federally owned and operated airports serving the greater Washington area"\* (emphasis added). Now when the FAA says that Dulles is "underutilized," it means that some thoughtless travelers are not using the facility as much as the FAA had hoped and planned for. But in seeking an "equitable balance," the FAA is trying to make airlines and passengers conform to its hopes and plans. Our government wants travelers to be fair to the airports, that is, to the FAA.

---

\*The quotes are from a DOT news release dated November 23, 1981. Note that DOT seemed interested in the equity of the balance between its own airports but was strangely silent about BWI.

Fairness comes up in other ways. When the airlines, under the pressure of restrictions associated with the air traffic controllers' strike, took to selling landing slots among themselves as a way of rearranging their routes, the FAA formally forbade such sales; the airlines were only allowed to trade them so that the relative wealth of airlines wouldn't determine the allocation of slots. When Braniff's suspension of flights left some slots unused, the FAA allocated them by lottery! After all, a lottery is "fair," that is, no one could accuse the FAA of favoritism in allocating routes and landing rights.

No private airport operator in the same position would act that way. Rather than charging average cost and imposing rules to ration customers at his facility, he would charge a high price--"all that the traffic would bear." He wouldn't waste a single moment worrying about the "fairness" of his price or an "equitable balance" of use of airports, or whether some otherwise "worthy" users, like air taxis or corporate planes, were being excluded. He would maximize his profits and, in doing so, he would unintentionally ration his airport in the most efficient fashion: only those travelers to whom the quick access was valuable would use it while those who cared more for the dollars than for time would use the more distant one. He would treat WNA as a business, not as a political football.

And he would make a fortune at it too. WNA is so much more valuable an airport than the others that most passengers would be willing to pay a premium to use it. A round number estimate is that at \$15 extra per passenger,\* few passengers would choose an outlying airport instead of WNA. But as things stand now, more than 15 million passengers use it per year. That works out to a cool \$225 million in profit (remember that WNA is now covering costs, including the costs of operating DIA, so anything in addition is gravy). And that says nothing about the 23 available slots per hour now being used by the Piper Cubs at a charge of \$4 per landing. So if we assume that they would become available for commercial airliners, the profit could be up to 50 percent higher.

Another way of looking at those numbers is to imagine that by failing to collect the rent, taxpayers (all of us) who "own" the airport are giving \$225 million per year to commercial air travelers who now use WNA (including some of us) and an additional multimillion dollar bonanza to the nonairline users. I call that a gift just as the IRS would call it a gift if a corporation were to allow a special group--say high government officials--to use a hunting lodge rent free or to provide free transportation to go there.

\* David Graham, Daniel Kaplan, and Kathy Sharp, "A proposal to Adopt Noise And Congestion Fees at Washington National Airport," CAB Office of Economic Analysis, January 26, 1981. They calculate that it would be worth \$24 to the average "business" traveler and \$9 to the average "vacation" traveler to use National rather than DIA. They then calculate that \$16.50 would be a successful rationing price.



Rent may be a four-letter word, but it serves several valuable functions in resource allocation: first, it forces people to consider competing uses for a scarce resource. WNA sits on 680 acres of valuable waterfront land. Comparable land in the area sells for about \$40 per square foot so the total package would be worth about \$1.2 billion. That valuable a property should be getting a return of over \$200 million per year (assuming interest at 18 percent); if a private airport operator couldn't pay that much in rent, the land should be sold and the money invested in something else. The calculation shown earlier suggests that using the land for an airport may well be the most efficient thing to do, but if it is, it is certainly not because anyone planned it that way. Governments don't impute rent for public property, and typically, they never consider alternative uses.

The second value of charging rent is that it provides a standard for determining if capital improvements are warranted, and if they are, it provides funds to pay for it. WNA is short on parking, access roads, and terminal facilities. The CAB suggests that it could also expand its air traffic handling capacity to accommodate more than 60 planes per hour by installing more modern equipment.\* Whether or not it should invest in expansion should be determined by the relation of the costs

---

\* Graham, et. al, Op cit. The article points out that the FAA's limit of 60 operations per hour was imposed in 1968 because of limits on apron space for commercial airliners. Despite expansion of ground facilities and airfield capacity, the limit has remained in effect.

and revenues the expansion would generate. But because WNA is a government facility, whatever revenues it generates go to the Treasury and are not available to finance expansion. The FAA must go through a political appropriations process to make the necessary improvements, competing with other pork-barrel projects for federal dollars. Important criteria are the party affiliation of the local Congressman, regional "equity" in fund distribution, the level of unemployment in the area, the size of the budget deficit, etc. It goes without saying that none of those issues should affect a business decision.

Perhaps the most important advantage of private operation, however, is that it would remove a major source of irritation for a lot of people. For example, if the FAA were to sell DIA, the new owner might well close it down as an airport. That would make the operators of BWI happy. From the very beginning, they felt that DIA was stealing their passengers and making life harder. The idea of closing DIA may sound extreme, but as I said earlier, the place is a white elephant; no private entrepreneur would maintain the amount of excess capacity we see in the three airports in the area and it isn't clear why the government should do any different. The entire passenger load could be shifted to BWI without causing more than a ripple there.

In addition, the wholly dedicated access road, that four-lane, divided empty highway could be opened up to local traffic, easing congestion in the surrounding area. The road is arranged so that cars

getting on it on the way toward the airport cannot get off before the airport, although they can get off if they are heading into town. But cars can only get on to the road at the airport if they are heading toward town. The road traffic problem is so aggravating that some people in the area get onto the road in the suburbs, drive all the way to DIA, turn around, and drive back to Washington in order to avoid the less good roads. It's as absurd as those planes taking off from WNA and stopping at DIA before flying nonstop more than 1000 miles. Of course, if the road were sold to the new airport owner, it could be opened as a toll road (probably the only source of profit in the whole establishment) with all the good results that I have claimed for privatization of airports.

The Secretary of Transportation would probably be happy too. Recently, when asked what he found to be the most difficult problems he faced, he picked out the airport problem in the D.C. area as the greatest single consumer of his time. He is the focus of all the conflicting interests in the facilities: local residents complain about the noise and the wasted road; airlines complain about the allocation of space, and time, and about the fees charged; Congressmen complain about the administration--personnel policies, behavior of the guards, etc--and almost everyone complains about the reservation of parking spaces for high ranking government officials.

Most of the complaints people now make about the airports would simply evaporate if they were privately operated. The noise complainers, so long as they didn't have to fight with the federal government, would actually have a chance to get their case heard in court. They might even stop complaining altogether if the community were to collect some taxes on the land and use the revenues to reduce the real estate taxes of those who now suffer from the noise. The airlines would almost certainly stop fighting about the allocation of landing rights, fees, and ground facilities. They would recognize immediately that politics no longer had anything to do with those issues, and they would treat them as business decisions. Congressmen might still complain, but even that is questionable. They are often cast as villains for fussing with the bureaucracy when, in fact, they are merely responding to constituent requests. If WNA were not a federal establishment, they might find themselves happily relieved of an unwanted burden. What is almost certain is that no private operator would ignore them. While the reserved parking would probably remain, it would no longer be the kind of public affront that it is now, where every consideration Congress gets from the bureaucracy is seen as evidence of the abuse of power.

I set out to show the bad side of government operation of airports in the D.C. area. It's a lucky thing I'm not a debater because I understand that debaters have to be prepared to take either side of any

issue, and I can't think of a single argument on the other side. It is an open and shut case.

And yet, for 16 years, since WNA was first rationed because of overcrowding, there have been essentially no changes in policy.

I quote from a letter I received last year from OMB when I suggested that more rational landing fees would both improve resource allocation and raise revenue:

"As you are aware, determination of landing fees is closely related to the issue of allocation of landing slots. Alternative methods of allocating slots have been the subject of much study at the Department of Transportation, culminating in the publication of a Notice of Proposed Rulemaking (NPRM) in the latter part of 1980. One of the alternatives set forth on the NPRM, using an auction-type process to allocate slots, is consistent with your suggestion that landing fees reflect the value of services provided.

The appropriate mechanism of allocating slots and establishing landing fees is of interest to this Administration. Your thoughts will be helpful as the issue is given further consideration. Thank you for taking the time to convey them to us."

I have received similar responses from OMB and the FAA on the many occasions since 1966 when, as an OMB staff economist, I first got involved with the issue. It is the standard "don't bother me with your 'impractical' ideas" letter you get when you send crank letters to important government officials. They don't want to think about correcting errors, even gross errors in policy just to make their operations more efficient.

This last little tale is not intended as a complaint about my having been mistreated. The moral, and the moral of this paper as a whole, is that government is inherently handicapped when it comes to running a business. Even if it adopted some of the practices of profit-oriented business, it would still be bound by bureaucratic rules and political incentives, and we could count on it to find new ways to be inefficient.

Trying to get the government to seek efficiency by imitating a private operation would be like putting artificial legs on a legless man and then asking him to run the 100-meter dash in the Olympics. It would be better than asking him to run the race with no legs at all, but you shouldn't expect him to come in anything but last. If you want an operation to be run efficiently, as a private operator would run it, get a private operator to do the job. That's what "privatization" is all about.

ONA PROFESSIONAL PAPERS - 1978 TO PRESENT\*

- PP 211  
Mizrahi, Maurice M., "On Approximating the Circular Coverage Function," 14 pp., Feb 1978, AD A054 429
- PP 212  
Mangel, Marc, "On Singular Characteristic Initial Value Problems with Unique Solution," 20 pp., Jun 1978, AD A056 535
- PP 213  
Mangel, Marc, "Fluctuations in Systems with Multiple Steady States. Application to Lanchester Equations," 12 pp., Feb 78 (Presented at the First Annual Workshop on the Information Linkage Between Applied Mathematics and Industry, Naval PG School, Feb 23-25, 1978), AD A071 472
- PP 214  
Weinland, Robert G., "A Somewhat Different View of The Optimal Naval Posture," 37 pp., Jun 1978 (Presented at the 1976 Convention of the American Political Science Association (APSA) Panel on "Changing Strategic Requirements and Military Posture"), Chicago, Ill., September 2, 1976), AD A056 228
- PP 215  
Collie, Russell C., "Comments on: Principles of Information Retrieval by Manfred Kochen," 10 pp., Mar 78 (Published as a Letter to the Editor, Journal of Documentation, Vol. 31, No. 4, pages 298-301), December 1975), AD A054 426
- PP 216  
Collie, Russell C., "Lotka's Frequency Distribution of Scientific Productivity," 18 pp., Feb 1978 (Published in the Journal of the American Society for Information Science, Vol. 28, No. 6, pp. 366-370, November 1977), AD A054 425
- PP 217  
Collie, Russell C., "Bibliometric Studies of Scientific Productivity," 17 pp., Mar 78 (Presented at the Annual meeting of the American Society for Information Science held in San Francisco, California, October 1976), AD A054 442
- PP 218 - Classified
- PP 219  
Hurtzinger, R. L., "Market Analysis with Rational Expectations: Theory and Estimation," 60 pp., Apr 78, AD A054 422
- PP 220  
Maurer, Donald E., "Diagonalization by Group Matrices," 26 pp., Apr 78, AD A054 443
- PP 221  
Weinland, Robert G., "Superpower Naval Diplomacy in the October 1973 Arab-Israeli War," 76 pp., Jun 1978 (Published in Superpower in the Mediterranean: Political Utility and Military Constraints, The Washington Papers No. 61, Beverly Hills and London: Sage Publications, 1979) AD A055 564
- PP 222  
Mizrahi, Maurice M., "Correspondence Rules and Path Integrals," 30 pp., Jun 1978 (Invited paper presented at the CNRS meeting on "Mathematical Problems in Feynman's Path Integrals," Marseille, France, May 22-26, 1978) (Published in Springer Verlag Lecture Notes in Physics, 106, (1979), 234-253) AD A055 536
- PP 223  
Mangel, Marc, "Stochastic Mechanics of Molecule-Molecule Reactions," 21 pp., Jun 1978, AD A056 227
- PP 224  
Mangel, Marc, "Aggregation, Bifurcation, and Extinction in Exploited Animal Populations," 48 pp., Mar 1978, AD A058 536  
"Portions of this work were started at the Institute of Applied Mathematics and Statistics, University of British Columbia, Vancouver, B.C., Canada
- PP 225  
Mangel, Marc, "Oscillations, Fluctuations, and the Hopf Bifurcation," 43 pp., Jun 1978, AD A058 537  
"Portions of this work were completed at the Institute of Applied Mathematics and Statistics, University of British Columbia, Vancouver, Canada.
- PP 226  
Ralston, J. M. and J. W. Mann, "Temperature and Current Dependence of Degradation in Red-Emitting GaP LEDs," 34 pp., Jun 1978 (Published in Journal of Applied Physics, 50, 3630, May 1979) AD A058 538  
"Bell Telephone Laboratories, Inc.
- PP 227  
Mangel, Marc, "Uniform Treatment of Fluctuations at Critical Points," 50 pp., May 1978, AD A058 539
- PP 228  
Mangel, Marc, "Relaxation at Critical Points: Deterministic and Stochastic Theory," 34 pp., Jun 1978, AD A058 540
- PP 229  
Mangel, Marc, "Diffusion Theory of Reaction Rates, I: Formulation and Einstein-Smoluchowski Approximation," 50 pp., Jan 1978, AD A058 541
- PP 230  
Mangel, Marc, "Diffusion Theory of Reaction Rates, II: Ornstein-Uhlenbeck Approximation," 34 pp., Feb 1978, AD A058 542
- PP 231  
Wilson, Desmond P., Jr., "Naval Projection Forces: The Case for a Responsive NAF," Aug 1978, AD A054 543
- PP 232  
Jacobson, Louis, "Can Policy Changes Be Made Acceptable to Labor?" Aug 1978 (Submitted for publication in Industrial and Labor Relations Review), AD A061 538

\*ONA Professional Papers with an AD number may be obtained from the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22151. Other papers are available from the Management Information Office, Center for Naval Analysis, 2000 North Beauregard Street, Alexandria, Virginia 22311. An index of Selected Publications is also available on request. The index includes a listing of Professional Papers, with abstracts, issued from 1968 to June 1981.

- PP 233  
Jacobson, Louis, "An Alternative Explanation of the Cyclical Pattern of Quits," 23 pp., Sep 1978
- PP 234 - Revised  
Jondrow, James and Levy, Robert A., "Does Federal Expenditure Displace State and Local Expenditure: The Case of Construction Grants," 29 pp., Oct 1979, AD A061 529
- PP 235  
Mizrahi, Maurice M., "The Semiclassical Expansion of the Anharmonic-Oscillator Propagator," 41 pp., Oct 1978 (Published in Journal of Mathematical Physics 20 (1979) pp. 844-855), AD A061 538
- PP 237  
Maurer, Donald, "A Matrix Criterion for Normal Integral Bases," 10 pp., Jan 1979 (Published in the Illinois Journal of Mathematics, Vol. 22 (1978), pp. 672-681)
- PP 238  
Utgoff, Kathleen Classen, "Unemployment Insurance and The Employment Rate," 20 pp., Oct 1978 (Presented at the Conference on Economic Indicators and Performance: The Current Dilemma Facing Government and Business Leaders, presented by Indiana University Graduate School of Business), AD A061 527
- PP 239  
Trost, R. P. and Warner, J. T., "The Effects of Military Occupational Training on Civilian Earnings: An Income Selectivity Approach," 38 pp., Nov 1979, AD A077 831
- PP 240  
Powers, Bruce, "Goals of the Center for Naval Analyses," 13 pp., Dec 1978, AD A063 759
- PP 241  
Mangel, Marc, "Fluctuations of Chemical Instabilities," 24 pp., Dec 1978 (Published in Journal of Chemical Physics, Vol. 69, No. 8, Oct 15, 1978), AD A063 787
- PP 242  
Simpson, William R., "The Analysis of Dynamically Interactive Systems (Air Combat by the Numbers)," 160 pp., Dec 1978, AD A063 760
- PP 243  
Simpson, William R., "A Probabilistic Formulation of Murphy Dynamics as Applied to the Analysis of Operational Research Problems," 18 pp., Dec 1978, AD A063 761
- PP 244  
Sherman, Allan and Horowitz, Stanley A., "Maintenance Costs of Complex Equipment," 20 pp., Dec 1978 (Published By The American Society of Naval Engineers, Naval Engineers Journal, Vol. 91, No. 6, Dec 1979) AD A071 473
- PP 245  
Simpson, William R., "The Accelerometer Methods of Obtaining Aircraft Performance from Flight Test Data (Dynamic Performance Testing)," 403 pp., Jun 1979, AD A075 226
- PP 246  
Brechling, Frank, "Layoffs and Unemployment Insurance," 35 pp., Feb 1979 (Presented at the Nber Conference on "Low Income Labor Markets," Chicago, Jun 1978), AD A096 629
- PP 248  
Thomas, James A., Jr., "The Transport Properties of Dilute Gases in Applied Fields," 183 pp., Mar 1979, AD A096 464
- PP 249  
Glasser, Kenneth S., "A Secretary Problem with a Random Number of Choices," 23 pp., Mar 1979
- PP 250  
Mangel, Marc, "Modeling Fluctuations in Macroscopic Systems," 26 pp., Jun 1979
- PP 251  
Trost, Robert P., "The Estimation and Interpretation of Several Selectivity Models," 37 pp., Jun 1979, AD A075 941
- PP 252  
Nunn, Walter R., "Position Finding with Prior Knowledge of Covariance Parameters," 5 pp., Jun 1979 (Published in IEEE Transactions on Aerospace & Electronic Systems, Vol. AES-15, No. 3, Mar 1979)
- PP 253  
Glasser, Kenneth S., "The d-Choice Secretary Problem," 32 pp., Jun 1979, AD A075 225
- PP 254  
Mangel, Marc and Quenbeck, David B., "Integration of a Bivariate Normal Over an Offset Circle," 14 pp., Jun 1979, AD A096 471
- PP 255 - Classified, AD B051 441L
- PP 256  
Maurer, Donald E., "Using Personnel Distribution Models," 27 pp., Feb 1980, AD A082 218
- PP 257  
Thaler, R., "Discounting and Fiscal Constraints: Why Discounting is Always Right," 10 pp., Aug 1979, AD A075 224
- PP 258  
Mangel, Marc S. and Thomas, James A., Jr., "Analytical Methods in Search Theory," 86 pp., Nov 1979, AD A077 832
- PP 259  
Glass, David V.; Hsu, In-Ching; Nunn, Walter R., and Perin, David A., "A Class of Commutative Markov Matrices," 17 pp., Nov 1979, AD A077 833
- PP 260  
Mangel, Marc S. and Cope, Davis K., "Detection Rate and Sweep Width in Visual Search," 14 pp., Nov 1979, AD A077 834
- PP 261  
Vila, Carlos L.; Zvijec, David J. and Ross, John, "Franki-Condon Theory of Chemical Dynamics. VI. Angular Distributions of Reaction Products," 14 pp., Nov 1979 (Reprinted from Journal Chemical Phys. 70(12), 15 Jun 1979), AD A076 287
- PP 262  
Peterson, Charles C., "Third World Military Elites in Soviet Perspective," 50 pp., Nov 1979, AD A077 835
- PP 263  
Robinson, Kathy L., "Using Commercial Tankers and Container-ships for Navy Underway Replenishment," 25 pp., Nov 1979, AD A077 836



- PP 264  
Weinland, Robert G., "The U.S. Navy in the Pacific: Past, Present, and Glimpses of the Future," 31 pp., Nov 1979 (Delivered at the International Symposium on the Sea, sponsored by the International Institute for Strategic Studies, The Brookings Institution and the Yomiuri Shimbun, Tokyo, 16-20 Oct 1978) AD A066 837
- PP 265  
Weinland, Robert G., "War and Peace in the North: Some Political Implications of the Changing Military Situation in Northern Europe," 18 pp., Nov 1979 (Prepared for presentation to the Conference of the Nordic Balance in Perspective: The Changing Military and Political Situation," Center for Strategic and International Studies, Georgetown University, Jun 15-16, 1978) AD A077 838
- PP 266  
Utgoff, Kathy Classen, and Brechling, Frank, "Taxes and Inflation," 23 pp., Nov 1979, AD A081 194
- PP 267  
Trost, Robert P., and Vogel, Robert C., "The Response of State Government Receipts to Economic Fluctuations and the Allocation of Counter-Cyclical Revenue Sharing Grants," 12 pp., Dec 1979 (Reprinted from the Review of Economics and Statistics, Vol. LXI, No. 3, August 1979)
- PP 268  
Thomson, James S., "Seaport Dependence and Inter-State Cooperation: The Case of Sub-Saharan Africa," 141 pp., Jan 1980, AD A081 193
- PP 269  
Weiss, Kenneth G., "The Soviet Involvement in the Ogaden War," 42 pp., Jan 1980 (Presented at the Southern Conference on Slavic Studies in October, 1979), AD A082 219
- PP 270  
Rennek, Richard, "Soviet Policy in the Horn of Africa: The Decision to Intervene," 32 pp., Jan 1980 (To be published in "The Soviet Union in the Third World: Success or Failure," ed. by Robert M. Donaldson, Westview Press, Boulder, Co., Summer 1980), AD A081 195
- PP 271  
McConnell, James, "Soviet and American Strategic Doctrines: One More Time," 43 pp., Jan 1980, AD A081 192
- PP 272  
Weiss, Kenneth G., "The Azores in Diplomacy and Strategy, 1940-1945," 46 pp., Mar 1980, AD A085 094
- PP 273  
Mabade, Michael K., "Labor Supply of Wives with Husbands Employed Either Full Time or Part Time," 39 pp., Mar 1980, AD A082 220
- PP 274  
Munn, Walter R., "A Result in the Theory of Spiral Search," 9 pp., Mar 1980
- PP 275  
Goldberg, Lawrence, "Recruiters Advertising and Navy Enlistments," 34 pp., Mar 1980, AD A082 221
- PP 276  
Goldberg, Lawrence, "Delaying an Overhaul and Ship's Equipment," 48 pp., May 1980, AD A085 095
- PP 277  
Mangel, Marc, "Small Fluctuations in Systems with Multiple Limit Cycles," 19 pp., Mar 1980 (Published in SIAM J. Appl. Math., Vol. 38, No. 1, Feb 1980) AD A086 229
- PP 278  
Mizrahi, Maurice, "A Targeting Problem: Exact vs. Expected-Value Approaches," 23 pp., Apr 1980, AD A085 096
- PP 279  
Walt, Stephen M., "Causal Inferences and the Use of Force: A Critique of Force Without War," 50 pp., May 1980, AD A085 097
- PP 280  
Goldberg, Lawrence, "Estimation of the Effects of A Ship's Steaming on the Failure Rate of Its Equipment: An Application of Econometric Analysis," 23 pp., Apr 1980, AD A085 098
- PP 281  
Mizrahi, Maurice M., "Comment on 'Discretization Problems of Functional Integrals in Phase Space'," 2 pp., May 1980, published in "Physical Review D", Vol. 22 (1980), AD A094 994
- PP 283  
Dismukes, Bradford, "Expected Demand for the U.S. Navy to Serve as An Instrument of U.S. Foreign Policy: Thinking About Political and Military Environmental Factors," 30 pp., Apr 1980, AD A085 099
- PP 284  
J. Kelison, W. Munn, and U. Suelita, "The Laguerre Transform," 119 pp., May 1980, AD A085 100  
"The Graduate School of Management, University of Rochester and the Center for Naval Analyses  
"The Graduate School of Management, University of Rochester
- PP 285  
Rennek, Richard B., "Superpower Security Interests in the Indian Ocean Area," 26 pp., Jun 1980, AD A087 113
- PP 286  
Mizrahi, Maurice M., "On the WKB Approximation to the Propagator for Arbitrary Hamiltonians," 25 pp., Aug 1980 (Published in Journal of Math. Phys., 22(1) Jan 1981), AD A091 307
- PP 287  
Cope, Davis, "Limit Cycle Solutions of Reaction-Diffusion Equations," 35 pp., Jun 1980, AD A087 114
- PP 288  
Golman, Walter, "Don't Let Your Slides Flip You: A Painless Guide to Visuals That Really Aid," 28 pp., (revised Aug 1982), AD A092 732
- PP 289  
Robinson, Jack, "Adequate Classification Guidance - A Solution and a Problem," 7 pp., Aug 1980, AD A091 212
- PP 290  
Watson, Gregory M., "Evaluation of Computer Software in an Operational Environment," 17 pp., Aug 1980, AD A091 213
- PP 291  
Maddala, G. S., and Trost, R. P., "Some Extensions of the Marlove Process Model," 17 pp., Oct 1980, AD A091 946  
"University of Florida

- PP 292  
Thomas, James A., Jr., "The Transport Properties of Binary Gas Mixtures in Applied Magnetic Fields," 10 pp., Sept 1980 (Published in Journal of Chemical Physics 72(10), 15 May 1980)
- PP 293  
Thomas, James A., Jr., "Evaluation of Kinetic Theory Collision Integrals Using the Generalized Phase Shift Approach," 12 pp., Sept 1980 (Printed in Journal of Chemical Physics 72(10), 15 May 1980)
- PP 294  
Roberts, Stephen S., "French Naval Policy Outside of Europe," 30 pp., Sept 1980 (Presented at the Conference of the Section on Military Studies, International Studies Association Kilauea Island, S.C.), AD A091 306
- PP 295  
Roberts, Stephen S., "An Indicator of Informal Empire: Patterns of U.S. Navy Cruising on Overseas Stations, 1869-1897," 40 pp., Sept 1980 (Presented at Fourth Naval History Symposium, US Naval Academy, 26 October 1979, AD A091 316)
- PP 296  
Dismukes, Bradford and Petersen, Charles C., "Maritime Factors Affecting Iberian Security," (Factores Maritimos que Afectan la Seguridad Iberica) 14 pp., Oct 1980, AD A092 733
- PP 297 - Classified
- PP 298  
Mizrahi, Maurice M., "A Markov Approach to Large Missile Attacks," 31 pp., Jan 1981, AD A096 159
- PP 299  
Jondrow, James M. and Levy, Robert A., "Wage Leadership in Construction," 19 pp., Jan 1981, AD A094 797
- PP 300  
Jondrow, James and Schmidt, Peter,\* "On the Estimation of Technical Inefficiency in the Stochastic Frontier Production Function Model," 11 pp., Jan 1981, AD A096 160  
\*Michigan State University
- PP 301  
Jondrow, James M.; Levy, Robert A. and Hughes, Claire, "Technical Change and Employment in Steel, Autos, Aluminum, and Iron Ore," 17 pp., Mar 1981, AD A099 394
- PP 302  
Jondrow, James M. and Levy, Robert A., "The Effect of Imports on Employment Under Rational Expectations," 19 pp., Apr 1981, AD A099 392
- PP 303  
Thomason, James, "The Rarest Commodity in the Coming Resource Wars," 3 pp., Aug 1981 (Published in the Washington Star, April 15, 1981), AD A104 221
- PP 304  
Duffy, Michael K.; Greenwood, Michael J. and McDowell, John M.,\*\* "A Cross-Sectional Model of Annual Interregional Migration and Employment Growth: Intertemporal Evidence of Structural Change, 1958-1975," 31 pp., Apr 1981, AD A099 393  
\*University of Colorado  
\*\*Arizona State University
- PP 305  
Nunn, Laura M., "An Introduction to the Literature of Search Theory," 32 pp., Jun 1981, AD A100 420
- PP 306  
Anger, Thomas E., "What Good Are Warfare Models?" 7 pp., May 1981, AD A100 421
- PP 307  
Thomason, James, "Dependence, Risk, and Vulnerability," 43 pp., Jun 1981, AD A102 698
- PP 308  
Mizrahi, M.M., "Correspondence Rules and Path Integrals," Jul 1981, Published in "Nuovo Cimento B", Vol. 61 (1981), AD A102 699
- PP 309  
Weinland, Robert G., "An (The?) Explanation of the Soviet Invasion of Afghanistan," 44 pp., May 1981, AD A100 422
- PP 310  
Stanford, Janette M. and Tai Te Wu,\* "A Predictive Method for Determining Possible Three-dimensional Foldings of Immunoglobulin Backbones Around Antibody Combining Sites," 19 pp., Jun 1981 (Published in J. theor. Biol. (1981) 88, 421-439, AD A100 423  
\*Northwestern University, Evanston, IL
- PP 311  
Bowes, Marianne, Brechling, Frank P. R., and Utgoff, Kathleen P., Classen, "An Evaluation of UI Funds," 13 pp., May 1981 (Published in National Commission on Unemployment Compensation's Unemployment Compensation: Studies and Research, Volume 2, July 1980), AD A100 424
- PP 312  
Jondrow, James; Bowes, Marianne and Levy, Robert, "The Optimum Speed Limit," 23 pp., May 1981, AD A 100 425
- PP 313  
Roberts, Stephen S., "The U.S. Navy in the 1980s," 36 pp., Jul 1981, AD A 102 696
- PP 314  
Jehn, Christopher; Horowitz, Stanley A. and Lockman, Robert F., "Examining the Draft Debate," 20 pp., Jul 1981, AD A106 192
- PP 315  
Buck, Ralph V., Capt., "Le Catastrophe by any other name...", 4 pp., Jul 1981, AD A102 697
- PP 316  
Roberts, Stephen S., "Western European and NATO Navies, 1980," 20 pp., Aug 1981, AD A104 223
- PP 317  
Roberts, Stephen S., "Superpower Naval Crisis Management in the Mediterranean," 35 pp., Aug 1981, AD A104 222
- PP 318  
Vego, Milan N., "Yugoslavia and the Soviet Policy of Force in the Mediterranean Since 1961," 187 pp., Aug 1981

- PP 319  
Smith, Michael W., "Antiair Warfare Defense of Ships at Sea," 46 pp., Sep 1981 (This talk was delivered at the Naval Warfare System and Technology Conference of the American Institute of Aeronautics and Astronautics in Washington on December 12, 1980; in Boston on January 20, 1981; and in Los Angeles on June 12, 1981.), AD A106 191
- PP 320  
Trost, R. P., Lurie, Philip and Berger, Edward, "A Note on Estimating Continuous Time Decision Models," 15 pp., Sep 1981, AD A106 193
- PP 321  
Duffy, Michael K. and Ladman, Jerry R., "The Simultaneous Determination of Income and Employment in United States--Mexico Border Region Economies," 34 pp., Sep 1981  
Associate Professor of Economics, Arizona State University, Tempe, AZ., AD A106 340
- PP 322  
Warner, John T., "Issues in Navy Manpower Research and Policy: An Economist's Perspective," 66 pp., Dec 1981, AD A110 221
- PP 323  
Bomse, Frederick M., "Generation of Correlated Log-Normal Sequences for the Simulation of Clutter Echoes," 33 pp., Dec 1981.
- PP 324  
Horowitz, Stanley A., "Quantifying Seapower Readiness," 6 pp., Dec 1981 (Published in Defense Management Journal, Vol. 18, No. 2), AD A 110 220
- PP 326  
Roberts, Stephen S., "Western European and NATO Navies, 1981," 27 pp., Jul 1982, AD A118 703
- PP 327  
Hammon, Colin, Capt., USN and Graham, David R., Dr., "Estimation and Analysis of Navy Shipbuilding Program Disruption Costs," 12 pp., Mar 1980, AD A112 514
- PP 328  
Weinland, Robert G., "Northern Waters: Their Strategic Significance," 27 pp., Dec 1980, AD A112 509
- PP 329  
Mangel, Marc, "Applied Mathematicians And Naval Operators," 40 pp., Mar 1982 (Revised), AD A116 598
- PP 330  
Lockman, Robert F., "Alternative Approaches to Attrition Management," 30 pp., Jan 1982, AD A112 510
- PP 331  
Roberts, Stephen S., "The Turkish Straits and the Soviet Navy in the Mediterranean," 15 pp., Mar 1982 (Published in Navy International)
- PP 332  
Jenn, Christopher, "The RDF and Amphibious Warfare," 36 pp., Mar 1982, AD A 113 592
- PP 333  
Lee, Lung-Fai and Trost, Robert P., "Estimation of Some Limited Dependent Variable Models with Application to Housing Demand," 26 pp., Jan 1982, (Published in Journal of Econometrics 8 (1978) 357-382), AD A 112 536
- PP 334  
Kenny, Lawrence W., Lee, Lung-Fai, Maddala, G. S., and Trost R. P., "Returns to College Education: An Investigation of Self-Selection Bias Based on the Project Talent Data," 15 pp., Jan 1982, (Published in International Economic Review, Vol. 23, No. 3, October 1979), AD A112 480
- PP 335  
Lee, Lung-Fai, G.S. Maddala, and R. P. Trost, "Asymptotic Covariance Matrices of Two-Stage Probit and Two-Stage Tobit Methods for Simultaneous Equations Models with Selectivity," 13 pp., Jan 1982, (Published in Econometrica, Vol. 48, No. 2 March, 1980), AD A112 483
- PP 336  
O'Neill, Thomas, "Mobility Fuels for the Navy," 13 pp., Jan 1982, (Accepted for publication in Naval Institute Proceedings), AD A112 511
- PP 337  
Warner, John T. and Goldberg, Matthew S., "The Influence of Non-Pecuniary Factors on Labor Supply," 23 pp., Dec 1981, AD A113 094
- PP 339  
Wilson, Desmond P., "The Persian Gulf and the National Interest," 11 pp., Feb 1982, AD A112 505
- PP 340  
Lurie, Philip, Trost, R. P., and Berger, Edward, "A Method for Analyzing Multiple Spell Duration Data," 34 pp., Feb 1982, AD A112 504
- PP 341  
Trost, Robert P. and Vogel, Robert C., "Prediction with Pooled Cross-Section and Time-Series Data: Two Case Studies," 6 pp., Feb 1982, AD A112 503
- PP 342  
Lee, Lung-Fai, Maddala, G. S., and Trost, R. P., "Testing for Structural Change by D-Methods in Switching Simultaneous Equations Models," 5 pp., Feb 1982, AD A112 482
- PP 343  
Goldberg, Matthew S., "Projecting the Navy Enlisted Force Level," 9 pp., Feb 1982, AD A112 484
- PP 344  
Fletcher, Jean, W., "Navy Quality of Life and Reenlistment," 15 pp., Nov 1981, AD A113 095
- PP 345  
Utgoff, Kathy and Thaler, Dick, "The Economics of Multi Year Contracting," 47 pp., Mar 1982, (Presented at the 1982 Annual Meeting of the Public Choice Society, San Antonio, Texas, March 5-7, 1982), AD A114 732
- PP 346  
Rostker, Bernard, "Selective Service and the All-Volunteer Force," 23 pp., Mar 1982, AD A113 096
- PP 347  
McConnell, James, M., "A Possible Counterforce Role for the Typhoon," 24 pp., Mar 1982, AD A116 601
- PP 348  
Jondrow, James, Trost, Robert, "An Empirical Study of Production Inefficiency in the Presence of Errors-in-The-Variables," 14 pp., Feb 1982, AD A113 591

- PP 349  
W. M. Breckenridge, O. Kim Melain, "Collisional Intra-multiplet Relaxation of  $Cd(5s^2p^2P_{0,1,2})$  by Alkane Hydrocarbons," 7 pp., Jul 1981. (Published in Journal of Chemical Physics, 76(4), 15 Feb 1982), AD A113 093
- PP 350  
Levin, Marc, "A Method for Increasing the Firepower of Virginia Class Cruisers," 10 pp., Apr 1982. (To be published in U.S. Naval Institute Proceedings), AD A116 602
- PP 351  
Coutre, S. E.; Stanford, J. M.; Hovis, J. G.; Stevens, P. W.; Wu, T. T., "Possible Three-Dimensional Backbone Folding Around Antibody Combining Site of Immunoglobulin MOPC 167," 18 pp., Apr 1982. (Published in Journal of Theoretical Biology), AD A116 603
- PP 352  
Barfoot, C. Bernard, "Aggregation of Conditional Absorbing Markov Chains," 7 pp., June 1982 (Presented to the Sixth European Meeting on Cybernetics and Systems Research, held at the University of Vienna, Apr 1982.), AD A116 603
- PP 353  
Barfoot, C. Bernard, "Some Mathematical Methods for Modeling the Performance of a Distributed Data Base System," 18 pp., June 1982. (Presented to the International Working Conference on Model Realism, held at Bad Honnef, West Germany, Apr 1982.), AD A116 604
- PP 354  
Hall, John V., "Why the Short-War Scenario Is Wrong for Naval Planning," 6 pp., Jun 1982., AD A118 702
- PP 356  
Cyike, Steven; Goldberg, Matthew S.; Hogen, Paul; Mairs, Lee; "Estimation of the Personal Discount Rate: Evidence from Military Reenlistment Decisions," 19 pp., Apr 1982., AD A122 419
- PP 357  
Goldberg, Matthew S., "Discrimination, Nepotism, and Long-Run Wage Differentials," 13 pp., Sep 1982. (Published in Quarterly Journal of Economics, May 1982.), AD A122 419
- PP 358  
Axt, George, "Evaluating Tactical Command And Control Systems—A Three-Tiered Approach," 12 pp., Sep 1982., AD A122 478
- PP 359  
Quester, Aline; Fletcher, Jean; Marcus, Alan; "Veteran Status As A Screening Device: Comment," 26 pp., Aug 1982., AD A123 658
- PP 361  
Quenbeck, David B., "Methods for Generating Aircraft Trajectories," 31 pp., Sep 1982., AD A122 368
- PP 362  
Horowitz, Stanley A., "Is the Military Budget Out of Balance?," 10 pp., Sep 1982., AD A122 368
- PP 363  
Marcus, A. J., "Personnel Substitution and Navy Aviation Readiness," 35 pp., Oct 1982., AD A122 420
- PP 364  
Quester, Aline; Nakada, Michael; "The Military's Monopsony Power," 29 pp., Oct 1982., AD A123 657
- PP 366  
Sprull, Nancy L.; Gestwirth, Joseph L., "On the Estimation of the Correlation Coefficient From Grouped Data," 9 pp., Oct 1982. (Published in the Journal of the American Statistical Association, Sep 1982, Vol. 77, No. 379, Theory and Methods Section.), AD A122 382
- PP 368  
Weinland, Robert G., "The Evolution of Soviet Requirements for Naval Forces—Solving the Problems of the Early 1960s," 41 pp., Dec 1982, AD A123 655
- PP 369  
Quester, Aline; Lockman, Robert, "The All-Volunteer Force: A Positive Perspective," 29 pp., Nov 1982.
- PP 370  
Rostker, Bernard D., "Human Resource Models: An Overview," 17 pp., Nov 1982., AD A123 656
- PP 372  
Hurley, William J., "An Overview of Acoustic Analysis," 46 pp., Jan 1983.
- PP 373  
Jacobson, Louis, "Research to Quantify the Effect of Permanent Change of Station Moves on Wives' Wages and Labor Supply," 35 pp., Jan 1983.
- PP 375  
Feldman, Paul, "Privatizing Airports in Washington, D.C.," 17 pp., Feb. 1983

